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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

September 26, 2001

Chuck Semborski, Environmental Supervisor
Energy West Mining Company
P.O. Box 310
Huntington, Utah 84528

Re: Conditional Approval of Temporary Cessation, PacifiCorp, Cottonwood / Wilberg, C/015/019-TC01B, Outgoing File

Dear Mr. Semborski:

The above-referenced amendment is conditionally approved upon receipt of seven (7) clean copies for incorporation. Once we receive these copies, we will send a stamped incorporated copy to you for insertion into your copy of the Mining and Reclamation Plan. A copy of our Technical Analysis is enclosed for your information.

If you have any questions, please feel free to call me at (801) 538-5325.

Sincerely,

Daron R. Haddock
Permit Supervisor

phh/sd
Enclosure
cc Price Field Office
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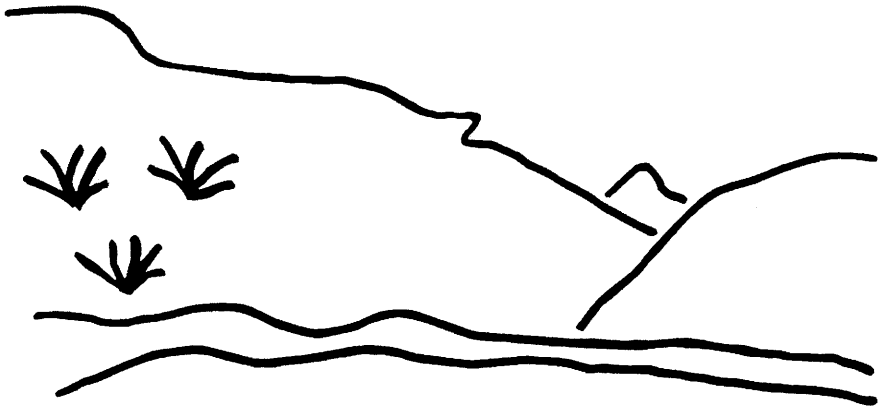
State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Cottonwood / Wilberg Mine
Temporary Cessation
C/015/019-TC01B-1
Technical Analysis
September 25, 2001

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TECHNICAL ANALYSIS

INTRODUCTION

On March 15, 2001, underground coal extraction operations at the Trail Mountain Mine ceased. At that time, the permittee began the removal of mining machinery and related support systems from the Trail Mountain as well as the Cottonwood / Wilberg Mine workings. The Trail Mountain Mine and the Cottonwood / Wilberg Mine were linked in that the mainline conveyor system of the Cottonwood Mine was used to convey Trail Mountain product through East Mountain to the truck load out located in the Cottonwood Mine main facilities area.

Energy West Mining Company submitted a notice of intent to enter the Cottonwood / Wilberg Mines and the Trail Mountain Mine into "temporary cessation" status to the United States Department of the Interior, Bureau of Land Management, Price Field Office on February 8, 2001. In a letter dated March 20, 2001, Energy West informed the UDNR/OGM of the planned abandonment of certain mining related apparatus and equipment in the Trail Mountain Mine and the Cottonwood / Wilberg Mines.

On May 22, 2001, the permittee notified the Utah Division of Oil, Gas and Mining of its intent to enter the Cottonwood / Wilberg Mine into temporary cessation status. That document was received at the UDNR/OGM on May 25, 2001. Prior to the sealing of the Cottonwood Mine, an underground evaluation of mining related apparatus and equipment was performed on May 4,2001 to quantify and evaluate the types of material which the permittee was intending to abandon in-Mine. It is Division policy that this evaluation of mining related material to be abandoned be performed such that a written finding can be made relative to the potential for impact to the hydrologic regime.

On August 7, 2001 an amendment to the Cottonwood / Wilberg Mine MRP relative to the Division's requirements for abandonment of material in-Mine was submitted. The intent of that document was to replace Chapter 3 of the currently approved mining and reclamation plan in its entirety, as well as include a description of procedures to be followed for the temporary cessation of operations, as required in R645-301-515.300 through 515.321.

This technical memorandum has been prepared to determine the adequacy of the permittee's commitments and procedure's to be followed and their relationship to the R645 coal rules in order to place a mine site under temporary cessation status. A finding relative to the potential for impact to the surface and groundwater hydrologic regimes is included within this technical analysis.

INTRODUCTION

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Minimum Regulatory Requirements:

Groundwater Monitoring

In order to protect the hydrologic balance underground mining activities shall be conducted according to the hydrologic reclamation plan. Ground-water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

Ground-water monitoring shall be conducted according to the ground-water monitoring plan. The Division may require additional monitoring when necessary. Ground-water monitoring data shall be submitted every 3 months to the Division or more frequently as prescribed by the Division. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any ground-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the Division and immediately provide for any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance. Plans and hydrologic information to evaluate and mitigate the noncompliance situation and information relevant to the PHC shall be submitted to the Division as required.

Ground-water monitoring shall proceed through mining and continue during reclamation until bond release. The Division may modify the monitoring requirements including the parameters covered and the sampling frequency if the operator demonstrates, using the monitoring data obtained, that: the operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; or, monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan.

Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of ground water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

Surface Water Monitoring

In order to protect the hydrologic balance, underground mining activities shall be conducted according to the approved plan, and the following: surface-water quality shall be protected by handling earth materials, ground-water discharges, and runoff in a manner that minimizes the formation of acidic or toxic drainage; prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and otherwise prevent water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet water-quality standards and effluent limitations, the operator shall use and maintain the necessary water-treatment facilities or water-quality controls. Surface-water quantity and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the approved plan.

Surface-water monitoring shall be conducted according to the approved surface-water monitoring plan. The Division may require additional monitoring when necessary. Surface-water monitoring data shall be submitted every 3 months to the Division or more frequently as prescribed by the Division. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any surface-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the Division and immediately provide for any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance. Plans and hydrologic information to evaluate and mitigate the noncompliance situation and information relevant to the PHC shall be submitted to the Division as required. The reporting requirements of the water monitoring plan do not exempt the operator from meeting any National Pollutant Discharge Elimination System (NPDES) reporting requirements.

Surface-water monitoring shall proceed through mining and continue during reclamation until bond release. The Division may modify the monitoring requirements, except those required by the NPDES permitting authority, including the parameters covered and sampling frequency if the operator demonstrates, using the monitoring data obtained, that: the operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; and, monitoring is no longer necessary to achieve the purposes set forth in the approved monitoring plan.

Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of surface water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

Gravity discharges from underground mines

Surface entries and accesses to underground workings shall be located and managed to prevent or control gravity discharge of water from the mine. The surface entries and accesses of drift mines first used after the implementation of a State, Federal, or Federal Lands Program and located in acid-producing or iron-producing coal seams shall be located in such a manner as to prevent any gravity discharge from the mine. Gravity discharges of water from an underground mine first used before the implementation of a State, Federal, or Federal Lands Program, may be allowed by the Division if it is demonstrated that the untreated or treated discharge complies with the performance standards and any additional NPDES permit requirements.

Water-quality standards and effluent limitations

Compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434.

Diversions: General

With the approval of the Division, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the Division.

The diversion and its appurtenant structures shall be designed, located, constructed, and maintained to: be stable; provide protection against flooding and resultant damage to life and property; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and, comply with all applicable local, State, and Federal laws and regulations.

Temporary diversions shall be removed when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process shall be restored. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion shall be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement shall not relieve the operator from maintaining water-treatment facilities as otherwise required.

A permanent diversion or a stream channel reclaimed after the removal of a temporary diversion shall be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel including the natural riparian vegetation to promote the recovery and the enhancement of the aquatic habitat. The Division may specify additional design criteria for diversions.

Diversions: Perennial and intermittent streams

Diversion of perennial and intermittent streams within the permit area may be approved by the Division after making the finding relating to stream buffer zones that the diversions will not adversely affect the water quantity and quality and related environmental resources of the stream. The design capacity of channels for temporary and permanent stream channel diversions shall be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream from the diversion. Protection against flooding and resultant damage to life and property shall be met when the temporary and permanent diversions for perennial and intermittent streams are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion. The design and construction of all stream channel diversions of perennial land intermittent streams shall be certified by a qualified registered professional engineer as meeting the performance standards and any design criteria set by the Division.

Diversions: Miscellaneous flows

Diversion of miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away from disturbed areas if required or approved by the Division. Miscellaneous flows shall include ground-water discharges and

ephemeral streams. The design, location, construction, maintenance, and removal of diversions of miscellaneous flows shall meet all of the general performance standards of this section. Protection against flooding and resultant damage to life and property shall be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

Discharge structures

Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, to reduce erosion, to prevent deepening or enlargement of stream channels, and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed according to standard engineering design procedures.

Analysis:

Ground-Water Monitoring

There is no change in the operational ground-water monitoring plan during temporary cessation. Hydrologic monitoring will continue as specified in the MRP.

Surface-Water Monitoring

There is no change in the operational surface-water monitoring plan during temporary cessation. Hydrologic monitoring will continue as specified in the MRP. During temporary cessation, the Trail Mountain Access entries are designated as a drain, and the Utah Division of Water Quality gave final approval to move the outfall location for UPDES 0022896 001 from Grimes Wash to Cottonwood Creek on July 20, 2001.

Gravity Discharges

During temporary cessation, the Trail Mountain Access entries are designated as a drain. The Utah Division of Water Quality gave final approval to move the outfall location for UPDES 0022896 001 from Grimes Wash to Cottonwood Creek on July 20, 2001.

Water Quality Standards and Effluent Limitations

There is to be no change in water quality standards and effluent limitations.

The UDNR/OGM prepared a Cumulative Hydrologic Impact Assessments (CHIA) for East Mountain (updated 1994) and the Cottonwood Creek Basin (1987), which included the Trail Mountain and Cottonwood/Wilberg Mines. The abandonment of mining related apparatus or equipment underground was not addressed in those CHIAs.

Consequences from abandoned mining machinery and fluids were not included in the Probable Hydrologic Consequences (PHC) determination in the Cottonwood/Wilberg Mine MRP. Water encountered in the Mine has little communication with the surface and is not subject to annual recharge events.

- Conditions in abandoned mines in the Wasatch Plateau are not conducive to oxidation or other chemical reactions.

- Recorded pH values for ground waters at the PacifiCorp Mines range from 6.5 to 9.7, but are typically neutral to slightly alkaline.

- With time, oxygen would be absent or at low concentration both in the air and waters of the abandoned mine. Other oxidizing agents would not typically be found in an abandoned mine.

- The cool temperatures in the abandoned mine would tend to retard rather than accelerate most chemical reactions.

Assuming the mine was to flood and the abandoned equipment was to be covered with water, several probable results and impacts can be evaluated.

- Flooding of the abandoned mine might be relatively rapid, but once flooded, flow of ground water into, through, and out-of the void spaces of the mine should be slow.

- If steel or other metals in the equipment were to oxidize, it would be at a very slow rate and the amount of iron and other metals added to the ground water at any one time would be very small.

- Oxides of most metals are insoluble or slightly soluble in water with a neutral pH (anions in solution in the water could increase solubility, but this is not anticipated based on typical ground-water chemistries of the region), especially at temperatures expected in the mine, so once formed, metal oxides would tend to precipitate as solids within the mine rather than flow in solution in the ground water. If any metal were to go into solution, concentrations would be highest near the equipment, but the volume of water in the flooded mine would dilute concentrations outside the immediate vicinity of the equipment.

- Structural dip is to the west, so movement of water both within the abandoned workings and in the enclosing strata is probably toward the Trail Mountain Access tunnel, the lowest point in the Cottonwood/Wilberg Mine, and Cottonwood Creek. At least in the area where it was measured in the mine, the potentiometric surface in the Blackhawk - Star Point Formations is also inclined towards the west (Volume 9 - Figure HF-5B). During temporary cessation the Trail Mountain Access tunnel is designated as a drain, and the Utah Division of Water Quality approved moving the outfall for UPDES 0022896 001 from Grimes Wash to Cottonwood Canyon on July 20, 2001. There is no approval for permanent discharge from this portal nor from any other part of the mine.

- Because of dilution and dispersion, natural seasonal fluctuations, and the limits of accuracy of analytical methods, changes in water quality from the abandonment of this equipment would not be expected to be large enough to be detected at springs, wells, or ground-water base flow to streams.

If the abandoned equipment is not covered with water as the mine floods, metals might oxidize at a faster rate. Even though possibly occurring over a shorter time period, the probable impacts would be negligible to nonexistent because there would be no water to convey potential contaminants to ground or surface waters.

Ferrous Metals

It is common for considerable tonnages of ferrous materials, such as the steel in roof bolts, wire mesh and longwall gate entry support cans to be routinely abandoned in underground coal mines. These materials cannot be removed without excessive costs and endangerment to the lives of miners. At the Genwal Crandall Canyon Mine located just north of the PacifiCorp mines, room-and-pillar mining requires the installation of approximately 400 tons of steel to produce each million tons of coal. However, longwall mining, as formerly practiced at the Cottonwood/Wilberg Mine, uses steel at a considerably lower rate. Less roof area requires support, because same is expected to cave shortly after the coal extraction process. In comparison to the amount of steel routinely abandoned during continuous mining operations, the additional volume of ferrous metal in the abandoning of belt structure or pipe is not significant.

Lubricants and Oils

Abandoned shields contain water-soluble lubricants, gear oil, ATF fluid, and greases that could eventually enter the hydrologic system. One hundred and four face shields were abandoned in the Wilberg Mine in 1984 due to a fire. Due to the emergency, there was no chance to remove any of these fluids. There has not been any subsequent attempt to remove these fluids because of safety considerations. The slow rate of oxidation of metal in the shields will delay release of these fluids. Failure of the metals will probably not be catastrophic so any release of the fluids will be in small increments over a long time. Material Safety Data Sheets (MSDS) for the hydraulic fluid and greases have been included in the 2000 Annual Report.

Polymers, Resins, Plastics, and Rubber

PVC piping contains polymers and resins, and perhaps other organic compounds. PVC generally has long-term stability, especially when not exposed to ultraviolet light. Products used in the manufacture of materials such as PVC often remain in very small, often undetectable amounts. Considering the amount of PVC being left underground and the other factors already discussed, the potential for impact to the hydrologic system from the PVC pipe is negligible.

Diversions

During temporary cessation, water conveyance structures are to be maintained as specified in the MRP.

Discharge Structures

During temporary cessation the Trail Mountain Access entries will drain the encountered ground water to Cottonwood Creek. This was reviewed and permitted through both the UDNR/OGM (C/015/019-AM01A) and the Utah Division of Water Quality. AM01A permitted the installation of a six-inch PVC line incorporating a 24-inch PVC dissipater as well as a metering manhole containing a three-inch Parshall flume. Final Utah DWQ approval for moving the outfall 001A location from Grimes Wash to Cottonwood Creek was received on July 20, 2001. The USDA/USFS Manti-LaSal National Forest was also involved in the permitting/ approval process.

Findings:

Abandoning the mining related apparatus and equipment will cause minimal, if any, disturbance to the hydrologic balance within the permit and adjacent areas. Same is not expected to cause material damage to the hydrologic balance. Therefore, the minimum regulatory requirements have been adequately addressed.

RECLAMATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Minimum Regulatory Requirements:

Hydrologic reclamation plan

The application shall include a plan, with maps and descriptions, indicating how the relevant regulatory requirements will be met. The plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbance to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; and to meet applicable Federal and State water quality laws and regulations. The plan shall include the measures to be taken to: avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water treatment facilities when needed; and control drainage. The plan shall specifically address any potential adverse hydrologic consequences identified in the PHC determination and shall include preventive and remedial measures.

Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with the performance standards for those structures.

Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities

Before abandoning a permit area or seeking bond release, the operator shall ensure that all temporary structures are removed and reclaimed, and that all permanent sedimentation ponds, diversions, impoundments, and treatment facilities meet the requirements of this Chapter for permanent structures, have been maintained properly and meet the requirements of the approved reclamation plan for permanent structures and impoundments. The operator shall renovate such structures if necessary to meet the requirements of this Chapter and to conform to the approved reclamation plan.

Analysis:

Ground-Water Monitoring

There is no change in the reclamation ground-water monitoring plan.

Surface-Water Monitoring

There is no change in the reclamation surface-water monitoring plan. During temporary cessation, the Trail Mountain Access entries are designed to drain. The UDNR/OGM and the Utah Division of Water Quality approved the relocation of the UPDES 0022896 001 outfall from Grimes Wash to Cottonwood Creek through proper permitting action.

Gravity Discharges

During temporary cessation, Mine water will discharge from the Trail Mountain Access

diesel roadway seal and the #1 portal of the Miller Canyon breakouts. Both discharge points are monitored via proper permits through the Utah Division of Water Quality and the UDNR/OGM.

Findings:

Abandoning the mining related apparatus and equipment will cause minimal, if any, disturbance to the hydrologic balance within the permit and adjacent areas. Same is not expected to cause material damage to the hydrologic balance. Therefore, the minimum regulatory requirements can be considered to have been adequately addressed.

CESSATION OF OPERATIONS

Regulatory Reference: 30 CFR 817.131, 817.132; R645-301-515, -301-541.

Minimum Regulatory Requirements:

Each person who conducts mining activities shall effectively support and maintain all surface access openings to underground operations, and secure surface facilities in areas in which there are no current operations, but operations are to be resumed under an approved permit. Temporary abandonment shall not relieve a person of his or her obligation to comply with any provisions of the approved permit.

Before temporary cessation of mining and reclamation operations for a period of 30 days or more, or as soon as it is known that a temporary cessation will extend beyond 30 days, each person who conducts underground mining activities shall submit to the Division a notice of intention to cease or abandon operations. This notice shall include a statement of the exact number of surface acres and the horizontal and vertical extent of subsurface strata which have been in the permit area prior to cessation or abandonment, the extent and kind of surface area reclamation which will have been accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures, and water-treatment activities that will continue during the temporary cessation.

The person who conducts underground mining activities shall close or backfill or otherwise permanently reclaim all affected areas, in accordance with this Chapter and according to the permit approved by the Division.

All surface equipment, structures, or other facilities not required for continued underground mining activities and monitoring, unless approved as suitable for the postmining land use or environmental monitoring, shall be removed and the affected lands reclaimed.

Analysis:

As noted above, underground coal extraction ceased at the Trail Mountain Mine on March 15, 2001. As the Trail Mountain Mine and the Cottonwood / Wilberg Mine were linked prior to the cessation of mining, and have the potential to be linked in the future, the permittee was desirous to also place the Cottonwood / Wilberg Mine under temporary cessation status.

Regulation R645-301-515.300 requires that the mining and reclamation plan for a permitted mine site incorporate a description of the procedures for the temporary cessation of operations. As noted in the first review of the notification for temporary cessation status amendment, this requirement was not addressed by the Cottonwood / Wilberg Mine mining and reclamation plan.

Energy West Mining Company submitted a "notice of intent" to the Division on May 22, 2001 to enter the Cottonwood / Wilberg Mine into temporary cessation status.

Regulation R645-301-515.310 requires that the permittee meet all of the terms and conditions of the currently approved mining permit, irregardless of the fact that the permitted site is considered to be under temporary cessation. The permittee's notice-of-intent letter of May 22 includes a description of the "mitigation measures to be employed in accordance with the terms and conditions of the permit approval, such as a statement of the number of surface acres involved in the cessation, extent of sub-surface strata, prior reclamation efforts accomplished on the property, and identification of all backfilling, regrading, revegetation, environmental monitoring, underground opening closures and water treatment activities that will continue during the temporary cessation."

The permittee's May 22, 2001 notice of intent commits the permittee to continue to conduct compliance maintenance as necessary as stated in the approved mining and reclamation plan in order to meet all permit conditions, as required under R645-301-515.310. However, as stated in the summary, the requirements mandated by R645 coal rules relative to "temporary cessation" had never been addressed within the Cottonwood / Wilberg Mine mining and reclamation plan. Therefore, the notice of intent letter was committing to maintain as required by the MRP something that had not been addressed within the MRP.

The proposal dated August 7, 2001 addresses the requirements of R645-301-515.310 in Volume 2, Page 3, Page's 12-15.

Regulation **R645-301-515.311** requires that the permittee will effectively support and maintain all surface access openings to underground operations, as well as all surface facilities in which there are no current operations, but operations are to be resumed under an approved permit. This regulation applies to all of the portals associated with the Cottonwood / Wilberg Mine. The May 22, 2001 documents that same were effectively sealed according to the requirements of 30 CFR Part 75.335, or in accordance with the MSHA approved sealing plan. Effective support remains in place at the outcrop areas through the use of concrete archways and other standard methods of ground control. As the portals have been "temporarily sealed" with solid cement block seals but not backfilled with incombustible material, the permittee has installed secured chain link fencing over same in accordance with 30 CFR 75.1711-3 to prevent unauthorized access to the seals. This chain link fencing was observed to be in place on the Wilberg Mine portals located in Grimes Wash on May 25, 2001. On that date, the Cottonwood portal seals were being completed.

All other surface facilities including the Mine buildings and shops, coal storage handling/loading facilities and sediment containment structures are covered under R645-301-515.311.

Regulation **R645-301-515.312** is relative to a surface coal mining and reclamation operation. The Cottonwood / Wilberg Mine was an underground operation. This regulation is not applicable.

Regulation **R645-301-515.320** requires the permittee to submit a notice of intent to cease or abandon operations, as soon as it is determined that the period of temporary cessation will extend beyond thirty days. Energy West Mining Company notified the UDNR/OGM with its notice of intent to enter the Cottonwood / Wilberg Mine into temporary cessation status on May 22, 2001. The portal seals at the Mine were completed on May 25.

Regulation **R645-301-515.321** requires any permittee who conducts underground coal mining and reclamation activities and who has submitted a notice of intent to enter into temporary cessation include with said notice a statement of the exact number of surface acres and the horizontal and vertical extent of subsurface strata which have been in the permit area prior to cessation or abandonment, the extent and kind of reclamation of surface area which will have been accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures, and water treatment activities that will continue during the temporary cessation.

Energy West Mining Company's letter of intent to enter the Cottonwood / Wilberg Mine into temporary cessation dated May 22, 2001, lists 101.74 acres of disturbed area and 10,600 acres within the permit area. No reclamation activities have been undertaken by the permittee; all surface facilities will remain intact at this time to enhance the potential for the development of the Cottonwood Canyon tract, which will be accessed from the Trail Mountain Mine.

There has not been any backfilling or regrading conducted within the disturbed areas of the Cottonwood / Wilberg Mine since the notification of "temporary cessation" was received. The notice of intent letter does not identify any backfilling or regrading activities that will occur during the temporary cessation period.

All revegetation work that has been performed is relative to the stabilization of topsoil storage areas, as well as the stabilization of reclaimed areas including the Cottonwood Fan Portal area, and the Miller Canyon portals. The notice of intent letter does not identify any revegetation activities that will be conducted during the period of temporary cessation.

The permittee's notice of intent letter commits to the maintenance and monitoring of all hydrologic conveyance structures as specified in the Cottonwood / Wilberg Mine mining and reclamation plan. The only water treatment activities that will occur during the period of temporary cessation will be the physical methods of treatment (allowing sediment to drop out via retention time) utilized by sediment ponds. The relocation of UPDES point 001A to the Trail Mountain Access intake portal seal will treat mine water discharge via three sediment dams and granite pea gravel filtration. This physical treatment method will occur inby the TMA intake portal seal. UPDES outfall parameters will be monitored according to the current permit,

UT0022896, for all treatment locations.

The closure of openings to access the underground workings has been previously addressed under **R645-301-515.311.**

The continuation of environmental monitoring has been committed to by the permittee and has been discussed previously under **R645-301-515.310.**

Regulation **R645-301-515.322** is relative to a surface coal mining and reclamation operation. Cottonwood / Wilberg Mine was an underground operation. This regulation is not applicable.

Findings:

The permittee's May 22, 2001 notice of intent letter to enter the Cottonwood / Wilberg Mine into temporary cessation status makes several commitments which refer to "as stated in the approved MRP" or "as specified in the MRP." The permittee has temporarily ceased operations at the Cottonwood / Wilberg Mine. With the approval of this submittal, all required procedures for the temporary cessations of operations will have been addressed within the Cottonwood / Wilberg mining and reclamation plan.

The information provided meets the minimum regulatory requirements of this section.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR 784.14; R645-301-730.

Minimum Regulatory Requirements:

The Division must provide an assessment of the probable cumulative hydrologic impacts (CHIA) of the proposed operation and all anticipated mining upon surface- and ground-water systems in the cumulative impact area. The CHIA shall be sufficient to determine, for purposes of permit approval, whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The Division may allow the applicant to submit data and analyses relevant to the CHIA with the permit application. An application for a permit revision shall be reviewed by the Division to determine whether a new or updated CHIA shall be required.

The CHIA does not need to be updated for this amendment. The only change to the hydrologic system is the new location of the outfall for UPDES 0022896 001.

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